

REMARKS

Claims 1-10 of the application stand rejected over the combination of US Patent No. 6,120,573 to Call and 6,051,041 to Wurz. Wurz is relied on as allegedly teaching the optimized microimpactor spacing of the device now being claimed. It is believed that the examiner is misreading the Wurz reference. Applicants maintain that Wurz actually teaches away from adopting the specific microimpactor spacing set forth in the present claims.

Present claim 1 defines the microimpactor spacing as meeting two criteria. The first is that the spacing between microimpactors within a single row is from 3-20 times the microimpactor width. The second is that the spacing between adjacent microimpactor rows is from about 3 to 20 times the microimpactor width.

Wurz describes a system in which the spacing of microimpactors within a single row satisfies the relationship $D/S = 2-10$, wherein D is the microimpactor diameter (or width) and S is the intra-row spacing. (See especially his claim 4 and columns 4-5, which do not contain the typographical errors that appear at column 3 line 15-20). This ratio represents the microimpactor diameter divided by intra-row spacing. Applicant's claims specify the inverse of this relationship, intra-row spacing divided by microimpactor diameter. In other words, applicant's claims specify the following relationship between microimpactor width and intra-row spacing:

$$S/D = 3-20$$

When Wurz' ratio is expressed in the same way (by inverting his equation), one obtains:

$$S/D = 0.1-0.5.$$

The upshot of this is that Wurz specifies very close spacing of microimpactors within a row (relative to microimpactor diameter), whereas the claims of this application specify very large intra-row spacings. Wurz takes exactly the opposite approach as does the present invention.

The same is true regarding Wurz' row-to-row spacing. Wurz expresses this using the relationship $e/s = 0.3-0.7$, wherein e is the row-to-row spacing and s is the intrarow spacing. Wurz defines s as $D/2-10$ (by rearranging the relationship in the 7th line of claim

4). Wurz' row-to-row spacing can therefore be expressed in terms of the microimpactor diameter as

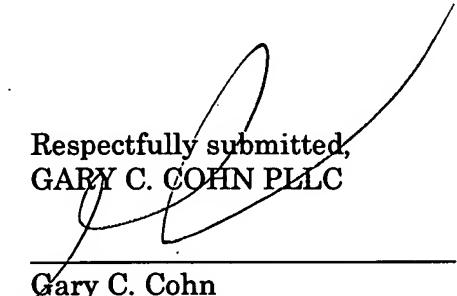
$$e/D = 0.03-0.35,$$

again reflecting a very close spacing, compared to microimpactor diameter. By contrast, present claim 1 specifies this ratio as having a value of 3-20. Again, the applicants are taking exactly the opposite approach than does Wurz.

As Wurz does not teach nor suggest to adopt applicant's microimpactor spacing, it cannot be said to support a rejection for obviousness, either by itself or in combination with the Call reference.

Therefore, the claims are considered to be patentable over the cited references. A notice of allowance is respectfully requested.

Respectfully submitted,
GARY C. COHN PLLC


Gary C. Cohn
Registration No. 30,456
Phone: (215) 931-0372
1147 N. 4th St., Unit 6E
Philadelphia, PA 19123